Application No.: 9-19-0858

Applicant: California Resources Corporation

Agent: Padre Associates, Inc.

Location: Solimar Beach, Ventura County.

Project Description: Removal of two abandoned seawater intake pipelines and an abandoned outfall pipeline from beach, intertidal and offshore areas (within 700 feet of shore); demolition and removal of concrete pipeline vault located between shoreline and Pacific Coast Highway.

Staff Recommendation: Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

As part of the process of quitclaiming and relinquishing its lease of state tidelands in Ventura County, California Resources Corporation (CRC) proposes to remove three pipelines that extend from a shoreline vault structure and terminate several hundred feet offshore. The pipelines were used for seawater intake and outfall from the late 1960s to the early 2000s. Each pipeline is 12 inches in diameter and they are partially buried by sand close to shore and resting on the seafloor outside the surf zone. The pipelines are in less than 15 feet of water throughout their length.
After removal of the pipelines, CRC would also deconstruct and remove the shoreline vault structure from within a roughly 40 foot long by 50 foot wide area of upper beach protected by rock rip-rap. At the completion of the project, the approximately 2,000 square foot area of beach currently occupied by the vault and rip-rap would be returned to bare sand and be once again open for coastal access and recreation. The rock rip-rap surrounding the concrete vault would be stockpiled onsite during vault removal and then placed in line with the existing rip-rap that extends upcoast and downcoast of the project site along Pacific Coast Highway. Existing shoreline armoring extends from the project site for several miles in both directions.

The proposed pipeline and vault removal operations would require the use of heavy equipment, vehicles, and specialized machinery on beach and intertidal areas, the construction of a vehicle access ramp on the beach, as well as the mooring and operation of a dive support vessel and use of underwater sediment displacement equipment (water jet devices) and cutting tools.

The key Coastal Act issues of concern are the project’s potential to adversely affect coastal access, marine biological resources and water quality. Coastal access would be affected through construction and use of the proposed vehicle access ramp to the beach and use of staging and construction areas on the beach and along Pacific Coast Highway for the estimated 70 day project duration. Marine biological resources would potentially be affected by the mooring of a dive support vessel in nearshore waters and the cutting and extraction of the pipelines within and/or adjacent to coastal waters. Water quality may be affected through accidental spills or discharges from project equipment and machinery.

The Commission staff recommends the Commission find that with implementation of the mitigation measures described in the project’s Mitigated Negative Declaration (MND) and recommended Special Conditions 1 through 7, the project would be carried out consistent with the coastal access, marine resource and water quality protection policies of the Coastal Act. Special Condition 1 would require implementation of twelve adverse impact avoidance, minimization and mitigation measures described in the MND, prepared for the project by the California State Lands Commission. In addition, Special Conditions 2, 4 and 5 would further reduce potential marine biological resource and habitat impacts by requiring CRC to take active steps to prevent the release of pipeline cutting debris and access ramp material onto the beach, and to ensure that CRC removes any concrete material or rip rap associated with the vault structure that becomes exposed in the future. Special Condition 3 would minimize coastal access impacts by directing project staging and construction areas away from the nearby beach access stairway and its adjacent parking. Special Conditions 6 and 7 would minimize marine biological resource impacts by prohibiting the placement of anchoring devices or project equipment within areas of hard-bottom habitat, by requiring the establishment and monitoring of a 500-foot marine mammal safety zone during use of pipeline cutting equipment underwater, and by requiring compliance with the Marine Wildlife Contingency Plan developed for CRC by its environmental consultant.

Commission staff recommends that the Commission APPROVE coastal development permit application 9-19-0858, as conditioned. The motion is on page 4. The standard of review is Chapter 3 of the Coastal Act.
### TABLE OF CONTENTS

I. MOTION AND RESOLUTION ................................................................. 4  
II. SPECIAL CONDITIONS ................................................................. 4  
III. FINDINGS AND DECLARATIONS .................................................... 5  
   A. Project Description and Background .............................................. 5  
   B. Consolidated Permit ........................................................................ 10  
   C. Consultations and Other Agency Approvals ................................... 10  
   D. Marine Resources and Water Quality ............................................ 11  
   E. Coastal Access and Recreation ..................................................... 17  
   F. California Environmental Quality Act ............................................. 21  

### APPENDICES

Appendix A – Substantive File Documents

### EXHIBITS

- Exhibit 1 – Project Site and Existing Condition
- Exhibit 2 – Photographs of Shoreline Concrete Vault Structure
- Exhibit 3 – Photographs of Pipelines
- Exhibit 4 – Proposed Anchor Positioning Plot
- Exhibit 5 – Project Mitigation Measures from MND
- Exhibit 6 – Letter to California State Lands Commission from Solimar HOA
- Exhibit 7 – Noble Consultants Technical Memorandum
I. MOTION AND RESOLUTION

Motion:

_I move that the Commission approve Coastal Development Permit 9-19-0858 subject to conditions set forth in the staff recommendation specified below._

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of Commissioners present.

Resolution:

_The Commission hereby approves the Coastal Development Permit for the proposed project and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment._

II. SPECIAL CONDITIONS

1. **Mitigated Negative Declaration.** CRC shall implement and adhere to all mitigation measures included in the Mitigated Negative Declaration prepared for the project and certified by the California State Lands Commission. A full list of these mitigation measures is provided in Exhibit 5.

2. **Containment and Cleanup of Pipeline Cutting Areas.** During any pipeline removal or vault demolition activities on beach areas, containment sheets, tarps or similar containment materials capable of capturing debris shall be installed on all surrounding beach areas. In advance of high tide each day, all beach areas used for cutting, shearing and removing activities shall be cleaned and inspected. All construction debris and materials, including tools and equipment, shall be removed from beach areas expected to be exposed to high tides or wave run-up. All cutting debris associated with underwater pipeline cutting activities shall be collected and removed from the marine environment.

3. **Staging Area.** To the maximum extent feasible, staging and construction areas shall be demarcated and used in a manner that preserves existing public beach access parking in the vicinity of the beach access stairs located approximately 300’ downcoast of the project site. All parking and storage of vehicles for on-site workers shall be along the CRC access road that extends inland from the shoreline vault site and/or the CRC property located inland of Highway 101.
4. **Access Ramp.** Upon project completion and removal of the construction equipment beach access ramp, all aggregate base and cobble material shall be fully removed from sandy beach areas and these areas shall be restored to pre-project conditions.

5. **Concrete Vault.** If, after project activities are completed, concrete material or rock rip-rap remains or becomes exposed on the beach beyond the seaward extent of the existing configuration of rip-rap to the upcoast and downcoast side of the concrete vault, CRC shall, within 30 days, submit a complete application to amend this coastal development permit to collect and remove this material. Upon approval of that permit amendment application, CRC shall carry out the authorized work and completely remove the remaining or exposed material from the beach. Any material used to backfill the vault removal site shall match the grain size, color and physical properties of natural sand at the project site.

6. **Anchoring and Mooring.** No anchors or mooring devices shall be placed within or less than five feet adjacent to areas of hard substrate, including all areas of rock recorded in the 2012 and 2019 geophysical surveys and 2018 biological survey of the project area carried out by Fugro, eTrac, and Padre Associates, respectively.

7. **Marine Mammal Precautions.**
   a. All project activities shall be carried out in compliance with the Marine Wildlife Contingency and Training Plan, prepared by Padre Associates Inc., dated December 2019 and submitted as part of the CDP application.
   b. A marine mammal monitor approved by the Executive Director shall be present at all times during offshore project activities. The monitor shall ensure that CRC and its contractors fully comply with the conditions of this permit related to biological protection.
   c. Pipeline cutting work shall be suspended if any marine mammals are observed within a 500 foot radius of the work site. Pipeline cutting may resume once the mammals are outside of this safety zone. The marine mammal monitor will be responsible for monitoring this zone during all pipeline cutting activities. In the event that the monitor determines a marine mammal has entered or is likely to enter this zone, the monitor shall have the authority to suspend pipeline cutting activities until the marine mammal has passed outside of this zone.

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III. **FINDINGS AND DECLARATIONS**

A. **Project Description and Background**
In 1967, Continental Oil constructed two seawater intake pipelines and an outfall line offshore of its oilfield located inland of Solimar Beach. All three pipelines are made of steel and measure 12 inches in diameter. The two intake pipelines extend approximately 680 and 630 feet offshore, respectively, and the outfall pipeline measures approximately 500 feet in length (Exhibits 1 and 4). The pipelines terminate in between 12 and 14 feet of water. These lines were used until the early 2000s to bring seawater to the oilfield for water flood oil extraction operations and to
occasionally discharge water and captured material from the inlet seawater filter back into the ocean. At no time were oil or hydrocarbons present in any of the intake or outfall lines.

In 2005, Occidental Petroleum Corporation (Oxy) acquired the former Continental Oil operations, including the lease on which the pipelines are located (the “Grubb lease”). On November 30, 2014, Oxy restructured its California operations, including those on the Grubb lease, into California Resources Corporation (CRC), an independent, publicly traded company.

CRC has ceased operations on the Grubb lease and is currently working with the California State Lands Commission to decommission and remove its equipment and facilities and quitclaim the lease. As part of this process, CRC proposes to fully remove the two intake pipelines (including the two concrete lattice box structures located at their offshore ends) and the adjacent outfall pipeline.

Additionally, CRC proposes to remove the 20 foot wide by 14 foot long and 27 foot deep concrete shoreline vault located amongst the existing rip-rap shoreline adjacent to Highway 1. Images of the project site and concrete vault are available in Exhibit 2. Rock rip-rap present around the vault would also be removed, and a portion of it replaced and reconfigured to be aligned with existing rock rip-rap upcoast and downcoast of the vault structure. Because the vault and its rock protection extend seaward approximately 40 feet beyond the upcoast and downcoast rip-rap, their removal would open up to 2,000 square feet of beach (an area approximately 50 feet wide and 40 feet long) along the Solimar shoreline. This beach area has been occupied by the vault structure and its associated rock protection since the late 1960s.

To facilitate removal of the vault structure and offshore pipelines, CRC proposes to construct and use a temporary equipment access ramp that would be located approximately 50 feet downcoast of the concrete vault. To construct the ramp, an excavator would remove and relocate the existing armor rock as needed to create the foundation for the equipment access ramp. All rock removed would be stored within an onsite staging area for replacement upon completion of decommissioning activities. An excavator and loader would then place smaller rock and cobble on top of the existing armor rock seawall to create a ramp of sufficient density and strength to allow tracked decommissioning equipment (such as excavators) to travel across it to the beach. The equipment access ramp would be approximately 30 feet wide and 60 feet long and would be removed upon project completion.

Finally, CRC also proposes to remove or abandon-in-place three 12 to 14 inch diameter steel pipeline segments from within a 36 inch diameter steel casing that extends under Highway 1 and the adjacent railroad tracks for approximately 200 feet inland of the shoreline vault. To accomplish this work, the steel casing would be exposed by two temporary excavations, each roughly 20 feet wide by 40 feet long. The excavations would be located on the CRC property inland of Highway 101 and its access road. The steel casing would then be filled with concrete grout or slurry, sealed and abandoned-in-place.

**Staging and Worksite Preparation**
Prior to the start of offshore and onshore decommissioning activities, the work area would be staged in accordance with the CalTrans and Ventura County Transportation Commission
approved Traffic Control Plan. A draft of this plan is included as Appendix J to the State Lands Commission’s Mitigated Negative Declaration1 and is required in that document to include safety measures such as signage, traffic cones, and flaggers. Worksite preparation would include setting up equipment and materials staging areas along the southern shoulder of Pacific Coast Highway (PCH); the likely closure of the south/eastbound bicycle and vehicle lane of PCH and the temporary rerouting of both south/eastbound and north/westbound traffic into the existing center divider and north/westbound lanes of PCH. While occasional traffic stops on PCH may be needed during equipment ingress and egress, no long-term full closure of PCH is anticipated. Signs would also be posted on-site to alert visiting recreational users of the timing and nature of short-term work activities in the project area. Adjacent residents (the nearest of which are located approximately 800 feet downcoast and 1,400 feet upcoast of the project site) would be given advanced written notification of proposed project activities, scheduling, and hours of work.

Offshore Pipeline Removal Activities and Alternatives
CRC proposes to remove the reinforced concrete lattice intake structures at the offshore terminal ends of the two intake pipelines and all three 12-inch-diameter submarine pipelines in their entirety.

Although both CRC and the California State Lands Commission staff considered partial removal of the lines and abandonment-in-place as alternatives, these options were rejected. The process of quitclaiming the state tidelands lease carries with it requirements for the lease to be returned to natural conditions – thus prompting the full removal of the pipelines and shoreline vault. If significant and unavoidable adverse environmental impacts would result from full removal (or if such removal would not be feasible), partial removal or abandonment-in-place may be pursued. However, the Mitigated Negative Declaration (MND) prepared for the project found that full removal of the lines would be feasible and could be accomplished without such impacts if appropriate mitigation measures were implemented. These mitigation measures are included in Exhibit 6.

Offshore pipeline removal work would be initiated by anchoring a dive support vessel over the terminus of the intake and outfall structures in accordance with the draft Marine Safety and Anchoring Plan (available as Appendix L of the MND1) that would be finalized and approved as part of the State Lands Commission’s approval of the project and certification of its Mitigated Negative Declaration. Divers would then be deployed to cut and remove the intake lattice structures from each intake pipeline using a guillotine saw with a hydraulic power pack. Once cut, the intake lattice structures would be winched vertically to the surface and recovered onboard the support vessel.

To remove the underwater pipeline segments, CRC proposes to mount a winch on top of the existing reinforced concrete shoreline vault and use it to pull the pipeline segments to shore along their existing alignments. Recovery operations would be scheduled when beach and surf zone sand cover is the lowest due to winter and early spring storm conditions. If the onshore ends of each pipeline are not already exposed, they would be exposed by an excavator operating

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1 Appendix J, Appendix L and the remainder of the MND is available here: https://www.slc.ca.gov/ceqa/3913-decommissioning-project/
on the beach during low tide. The ends of each pipeline would be cut and prepared for rigging of a pull cable or bridle. Tension would then be slowly increased on the pipeline pulling cable allowing each pipeline to be pulled both vertically and horizontally until it is completely free of the surf zone sand cover. The pipelines would then be pulled along their existing alignments up onto the beach where they would be cut into lengths for trucking off-site. Once cut, the segments would be lifted from the beach, placed on a flatbed truck and trucked to a certified off-site recycler or disposal facility. This use of the vault and associated recovery of the offshore pipelines to shore would be performed prior to demolition and removal of the shoreline vault.

Although engineering calculations carried out as part of the California State Lands Commission CEQA review have determined that pulling forces needed to free the pipeline segments from the surf zone do not exceed the tensile strength of the pipelines, a portion of the pipelines may not be able to be recovered from shore due to unanticipated site conditions or pipeline deterioration. Should the onshore recovery operation be unsuccessful in bringing all the offshore pipeline segments to shore, an alternative offshore recovery process would be used to recover the remaining offshore pipeline segments. This would involve the use of an anchored offshore dive support vessel and divers equipped with pipeline cutting tools. Within the existing pipeline corridor, pipeline segments would be cut into manageable segments and lifted vertically to the surface for recovery on the support vessel using an onboard winch or crane. The dive vessel would be positioned over each cut point using the proposed three-point anchoring system described in the Marine Safety and Anchoring Plan (available as Appendix L of the MND).

In the event an unrecovered pipeline segment is located within the surf zone, recovery efforts would have to be limited to periods of low wave action and extreme low tides. These recovery efforts would also be timed during the winter and early spring beach profile conditions when the least amount of sand would be over the pipelines. If a remaining section is on the seaward side of the surf zone, divers would be deployed from the dive support vessel to expose the pipeline using handheld jet pump tools and then rig the exposed section for pulling to the vessel.
Alternatively, if the remaining section is on the shoreward side of the surf zone, an excavator would be used during a period of extreme low tide to expose the remaining segment and rig the section for recovery to the beach using the vault mounted winch. These same methods would be used to uncover and expose the pipeline prior to winching if it is not naturally exposed at that time.

**Concrete Vault Removal**

CRC proposes to remove all equipment and materials from inside the shoreline concrete vault before removing the entire vault structure down to five feet below the existing beach contour. Given the expected sand height on the beach, this would likely result in the abandonment-in-place of the bottom seven feet of the four concrete vault walls.

The decommissioning of the vault would begin once the offshore pipelines have been removed. The reinforced concrete vault ceiling would be saw cut and removed to allow access to the interior of the vault. The water in the vault, which was sampled in early 2019 and found to be contaminant free, would be re-sampled, pumped out, and shipped off-site for appropriate disposal. Once the water has been removed, the internal water pumps, piping, two levels of grating, and other ancillary equipment would be removed and trucked off-site for recycling or disposal.

To facilitate vault removal, all rip-rap rock currently surrounding the vault would be removed to expose the vault walls down to the beach elevation (as shown in the figure below). Sand would also be excavated from the vault exterior in order to facilitate vault removal. The perimeter around the open excavation would be fenced off. Lower portions of the existing riprap around the perimeter of the vault would be left in place to inhibit backfill from surrounding sand during high tide periods.

Once the rip-rap rock has been relocated from the outside of the vault, the four vault walls would be cut into removable sections with the use of a hydraulically powered rotary demolition saw (cuts both concrete and steel) attached to an excavator boom (as shown in the figure below). The excavator would make a horizontal cut around the base of the walls at an elevation at least five feet below the existing sand grade (or at a lower elevation if conditions permit). After the base cut has been completed, the saw would be used to cut the walls into vertical sections for removal.
An excavator would then be used to grasp the cut wall pieces and place them in trucks for off-site disposal or recycling at certified facilities. The vault removal process would likely result in several days during which the vault would fill with water at high tide periods. During low tide work periods, the water would be pumped back out and sand that has migrated back into the vault would be removed, as needed.

The 36-inch-diameter steel casing that connects into the shoreward side of the vault, and pipes contained in that casing, would be excavated and cut back approximately even with the existing earth slope of the armor rock seawalls that exist on either side of the vault. The casing and pipes contained in the casing would have been purged and grouted or removed, if feasible.

Once all four vault walls are cut at least five feet below the surrounding sand level, the void resulting from removal of the vault walls and equipment would be backfilled with sand stockpiled from onsite excavations and supplemented with sand imported from a local source. Depending on the amount of natural sand movement, it is estimated that approximately 125 cubic yards of sand would be used to fill voids within the seawall. The site would then be recontoured and the armor rock repositioned along the existing alignment of surrounding areas.

**B. Consolidated Permit**

Coastal Act Section 30601.3 provides the Commission with the authority to act upon a consolidated permit for proposed projects that require a coastal development permit from both a local government with a certified local coastal program (LCP) and the Commission. This authority is triggered if the applicant, local government and Executive Director (or Commission) consent to consolidate the permit. For the proposed project, a variety of decommissioning and staging activities are proposed to be carried out above the mean high tide line within the jurisdiction of the County of Ventura under its certified Local Coastal Plan. On June 5, 2019, the County of Ventura, with the consent of the applicant and Executive Director, agreed to consolidate permit action for aspects of the proposed work that would be carried out in the County of Ventura’s LCP jurisdiction with aspects that would be carried out within the Commission’s retained jurisdiction, consistent with Coastal Act Section 30601.3. The standard of review for such consolidated permits is the Coastal Act, with LCP policies used for guidance.

**C. Consultations and Other Agency Approvals**

**County of Ventura**

During the preparation of this report, the Commission staff coordinated with County of Ventura planning staff to address any potential concerns the County might have regarding the proposed project.

**U.S. Army Corps of Engineers**

The U.S. Army Corps of Engineers (ACOE) has regulatory authority over the proposed project under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 1344) and Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act regulates structures or work in navigable waters of the United States. Section 404 of the Clean Water Act regulates fill or discharge of materials into waters and ocean waters.
On November 5, 2019, the ACOE approved authorization for the project under Nationwide Permit 3 (Maintenance activities), contingent upon the issuance of a Coastal Zone Management Act consistency certification from the Commission. Pursuant to Section 307(e)(3)(A) of the Coastal Zone Management Act (CZMA), any applicant for a required federal permit to conduct an activity affecting any land or water use or natural resource in the coastal zone must obtain the Commission’s concurrence in a certification to the permitting agency that the project will be conducted consistent with California’s approved coastal management program. The subject coastal development permit (9-19-0858) will serve as Commission review of the project under the CZMA.

California State Lands Commission
On December 19, 2019, the California State Lands Commission (CSLC) published a Mitigated Negative Declaration (MND) for the proposed project. This MND is scheduled to be considered for certification by CSLC at a special hearing on February 4, 2019. At the same hearing, CSLC will also be considering CRC’s application to amend and quitclaim its existing lease for the project site. At this hearing, CSLC staff will be recommending certification of the MND and approval of the project. Commission and CSLC staff coordinated closely during the development and public comment period for the project MND, including through participation in a joint conference call on January 30th with representatives of the Solimar Home Owners Association to discuss and address the concerns they had raised (further described on page 20 of this staff report).

Tribal Governments
As part of the Commission’s review process and CSLC’s MND preparation, agency staff reached out to the following ten tribal contacts obtained from the Native American Heritage Commission and received no comments or concerns:

- Gino Altamirano, Chairperson, Coastal Band of the Chumash Nation
- Eleanor Arrellanes, Barbareño / Ventureño Band of Mission Indians
- Raudel Banuelos, Barbareño / Ventureño Band of Mission Indians
- Fred Collins, Spokesperson, Northern Chumash Tribal Council
- Kenneth Kahn, Chairperson, Santa Ynez Band of Chumash Indians
- Julio Quair, Chairperson, Chumash Council of Bakersfield
- Mona Tucker, Chairperson, yak tityu tityu tilhini – Northern Chumash Tribe
- Julie Lynn Tunamait-Stennsle, Chair, Barbareño / Ventureño Band of Mission Indians
- Patrick Tunamait, Barbareño / Ventureño Band of Mission Indians
- Mark Vigil, Chief, San Luis Obispo County Chumash Council

D. Marine Resources and Water Quality

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy
populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

The proposed pipeline and vault removal activities, including winching to shore and/or underwater pipeline cutting and removal, mooring and use of a support vessel, and use of heavy equipment in beach and intertidal areas for excavation and removal of the concrete pipeline vault have the potential to adversely affect marine resources, water quality and the biological productivity of coastal waters.

**Pipeline Removal**

CRC proposes to use two methods to remove the three 500 to 680 foot long outfall and intake pipelines. The preferred method would be to connect a cable to the nearshore end of each pipeline and pull it slowly to shore with a high powered winch anchored in place on the shoreline at the pipeline’s concrete vault. If the full pipelines cannot be recovered with this method, the alternative removal method would be implemented. Using this method, divers and a diver support vessel would be used to cut the pipelines into sections underwater and lift them onto the support vessel for transport to shore. Prior to use of either removal method, the approximately six foot long by one foot high concrete lattice boxes on the seaward terminus of the two intake lines would be cut away from the pipelines by divers and winched vertically to the surface for removal by the support vessel.

These proposed removal activities have the potential to damage and disturb seafloor habitats and associated organisms. Specifically, dragging the three pipelines to shore would disturb the habitats within and directly adjacent to the pipeline corridors and may injure or dislodge the algae and slow-moving or sessile organisms found within them. The slow speed of dragging operations would allow fish and mobile invertebrates, such as crabs and lobster, to move away and seek refuge in adjacent areas outside of the pipeline corridor. However, less mobile species would be damaged or lost. Given the small diameter of the pipelines (12 inches) and proposal to pull them directly to shore within their existing corridors, the disturbance area from pipeline removal would be limited to a maximum of roughly six inches to one foot on either side of the pipelines. Any disturbance or damage to seafloor habitats and organisms that would result from the use of underwater cutting tools and the small-scale movement of the pipelines that would occur if the underwater sectioning removal method is used would be limited to this same narrow corridor. With offshore pipeline lengths of 500 feet, 630 feet, and 680 feet, the total disturbance area would be approximately 3,620 to 5,430 square feet.
Based on information collected by divers in 2018 during biological surveys and by side-scan sonar in 2012 and 2019, seafloor habitat within this area is comprised of fine and medium grained sands, loose cobbles and exposed, low-relief outcappings of bedrock. Sea floor conditions within the work areas suggest frequent periods with high levels of wave and/or current exposure and sand movement. The species assemblages observed during the surveys include many species capable of surviving in such dynamic environments and include common species such as bryozoans, sponges, various small red and green algae species, spiny lobster, sea stars, and a variety of marine snails. Although a bed of giant kelp is present offshore of the project site, no kelp or eelgrass beds are present within the proposed work areas.

While the pipeline corridors pass over several sections of exposed bedrock and cobble reef, the majority of the proposed disturbance area is made up of soft substrate materials such as sand and silt. These types of seafloor habitats – particularly in high-energy nearshore areas – are frequently subjected to natural disturbance and change. The species that inhabit and persist in such areas are therefore often capable of overcoming disturbances and quickly recolonizing. Although the total disturbance area of soft substrate habitat that would result from the pipeline removal activities is several thousand square feet, this area would be made up of narrow bands of disturbed habitat surrounded by undisturbed natural areas of similar habitat. As a result, refuge areas and unaffected source populations of species that occupy these habitats would be available in the immediately vicinity. The presence of such areas and populations and the limited and short-term disturbance to soft substrate habitat that would result from the proposed pipeline removal activities would therefore not adversely affect marine biological resources or the biological productivity of coastal waters.

Adverse impacts to the limited areas of exposed bedrock and cobble within the pipeline corridor would also not be significant. While rocky reef areas are known as some of the most productive and important marine habitats offshore of California, the rocky habitats within the pipeline removal disturbance area are in shallow water of less than 15 feet and experience high energy and frequent scour and burial from the movement of sand and cobble. As a result, most of these rocky habitats are barren or support a lower diversity, density and abundance of species than rocky reef located in deeper areas that are less energetic and dynamic. Additionally, the majority of habitat disturbance resulting from pipeline removal activities would be focused within the area directly below the pipeline itself. In this area, the rocky habitat is occupied by the artificial materials of the pipelines and the marine species that would naturally occur there are spatially excluded. Therefore, the scouring and short-term disturbance of this habitat would have minimal adverse effects on marine life. Additionally, the removal of the pipelines from this habitat would open new areas of natural habitat for colonization and use by marine species. For these reasons, adverse impacts to marine wildlife and habitats from the proposed pipeline removal would be short-term and minimal and would be compensated by the re-opening of natural habitat areas within the pipeline corridors once the pipelines are removed.

**Vessel Mooring**

The proposed temporary placement of three 155 pound mooring anchors for the dive support vessel also has the potential to adversely affect marine habitats and wildlife. When anchors are placed on the seafloor, they may disturb, displace, and/or crush habitat and organisms within their footprint. In total, the proposed anchor installation would result in a maximum of roughly
100 square feet of disturbed seafloor, distributed between the five proposed anchor installation sites.

As shown in the proposed anchor positioning plot in Exhibit 4, all five anchoring sites for the dive support vessel are proposed to be within areas of soft sandy seafloor. In addition to providing a more secure anchoring surface, these anchoring sites were chosen to help minimize adverse impacts to marine life and habitats. Soft substrate areas used for anchoring would be expected to recover quickly and naturally restore to prior conditions upon removal of the dive support vessel anchors.

To help ensure that the proposed anchor sites used are made up of soft substrate habitat, in Special Condition 1, the Commission is incorporating the mitigation measures established in the project’s Mitigated Negative Declaration (MND). These mitigation measures include MM BIO-5 which requires CRC to implement its Marine Safety and Anchoring Plan (available as Appendix L of the MND). The Marine Safety and Anchoring Plan includes requirements for the anchors to be “flown” into place and subsequently lifted using a secondary support vessel so as to avoid dragging across nearby areas of rocky reef or hard substrate. In addition, Special Condition 6 would prohibit anchors or mooring devices from being placed within or directly adjacent to areas of hard substrate, including all areas of rock recorded in the 2012 and 2019 geophysical surveys completed by Fugro and eTrac and the 2018 biological survey of the project area carried out by Padre Associates.

Through implementation of these measures and Special Conditions 1 and 6, the proposed vessel anchoring would be carried out in a manner that avoids and minimizes adverse impacts to marine life and sensitive marine habitats.

**Marine Mammals**

The proposed use of underwater cutting equipment – associated with the potential sectioning in-place of the pipelines and removal of the concrete lattice boxes from the intake pipelines - has the potential to adversely affect marine mammals due to the elevated underwater sound levels that would occur in the immediate vicinity of the activity.

In addition, the use of the underwater cutting equipment, dive support equipment, and navigational safety equipment - such as buoys and associated lines, would involve the placement of small diameter hoses and lines through the water column in the project area. Such lines present a known entanglement risk to marine mammals, particularly larger species such as sea lions, dolphins and whales.

To minimize this entanglement risk and prevent damaging effects to marine mammals from elevated levels of underwater sound, Special Condition 7 would require CRC to have a marine wildlife observer (MWO) on its support vessel and to establish a 500-foot radius stop-work zone monitored by the MWO during underwater cutting operations. The Executive Director-approved

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2 Appendix L and the remainder of the MND is available here: [https://www.slc.ca.gov/ceqa/3913-decommissioning-project/](https://www.slc.ca.gov/ceqa/3913-decommissioning-project/)
MWO on site would have the authority to suspend or delay underwater cutting operations if a mammal passes within the safety zone.

The presence of the MWO and implementation of CRC’s Marine Wildlife Contingency and Training Plan (established through mitigation measure MM BIO-1 of the project MND and required in Special Condition 1) would also provide additional protection from injury or entanglement for marine mammals by providing notification to marine mammal experts and rapid response if any unforeseen issues arise. Further, the presence of an MWO onboard during transit of support vessels to and from the project site would help minimize the risk of collisions with marine mammals by providing a highly trained lookout when the vessel is underway. Therefore, although noise and entanglement or collision risk from certain project activities could put at risk or hinder the normal activities of marine wildlife in the area, the project is conditioned to minimize these potential adverse impacts.

**Marine Debris**

The proposed project involves pipeline cutting operations in marine and intertidal beach areas. These operations would be carried out on the beach near the pipelines’ shoreline vault if they are successfully winched to shore or in-place along the underwater pipeline corridor if winching operations are unsuccessful. To achieve the appropriate pipeline section lengths for offsite transport and disposal, approximately 40 to 60 cuts of the 12 inch diameter pipelines would be required. While use of underwater or onshore cutting tools is only expected to generate minimal amounts of fine dust, some larger pieces of metal or pipeline coating material may also become dislodged or released as the pipelines are sectioned. This material could then become marine debris that would pose a potential risk of injury to wildlife, beach use or habitat. To help ensure that any such material is captured and transported offsite for removal, Special Condition 2 would require all beach areas to be used for pipeline cutting and vault removal to be prepared in advance with containment sheets, tarps or similar containment materials. This would help capture debris generated during pipeline and vault segmenting and prevent its release onto the beach. In advance of high tide each day, Special Condition 2 would also require all beach areas used for pipeline cutting, shearing or other project activities such as vault demolition to be cleaned and all construction debris and materials, including tools and equipment, to be removed that may be exposed to high tides or wave run-up. Finally, Special Condition 2 would also require all cutting debris associated with underwater pipeline cutting activities to be collected and removed from the marine environment.

With these measures in place, the Commission finds that CRC’s proposed pipeline and vault cutting and removal operations would be carried out in a manner that would avoid and minimize the generation and release of marine debris and protect marine biological resources and the productivity of marine waters.

**Heavy Equipment and Spill Risk**

The project MND notes:

Refined products (i.e., diesel, gasoline) are more toxic than heavier crude, and the loss of fuel or lubricating oil from the [dive support vessel] during Project operations could affect the water column, seafloor, intertidal habitats, and associated biota, especially sensitive early life stage forms of fish and invertebrates. Marine invertebrates would experience the
heaviest impacts from an oil spill since the oil would settle out on rock and nearby kelp reefs and cause direct mortality from ingestion and reduced respiration. Marine wildlife exposed to oil spills could experience fur or feather contamination, loss of buoyancy, and loss of locomotive capabilities as well as direct lethal toxicity to or sub-lethal irritation. Marine mammals may also suffer from direct skin contact resulting in eye irritation, burns to mucous membranes of eyes and mouth, and increased vulnerability to infection. Baleen whales are particularly vulnerable because of their surface feeding behavior. Turtles are not likely to be in the Project area, but sea turtles are vulnerable to oil impacts due to their indiscriminate feeding in convergence zones, long pre-dive inhalations, and lack of avoidance behavior (Milton et al. 1984).

The Project vessel would be small and have a limited amount of petroleum-fueled equipment on board, which greatly reduces both the likelihood that a release would occur and the severity of any release. In addition, large equipment operating on the beach would be checked daily for leaks prior to entering the work area and would not be left on the beach overnight. Regardless, the release of petroleum into the marine environment is considered a potentially significant impact. [Mitigation measure] MM HAZ-1 would require implementation of the Oil Spill Response and Contingency Plan (Appendix H) to ensure hazardous materials are managed and stored properly in the coastal environment to reduce the oil spill potential, and would establish a protocol for notification and clean-up to reduce the impact if a spill occurs.

In addition to the use of the dive support vessel, the project also includes the proposed use of heavy equipment (including an excavator, bulldozer, and crane) on the beach and areas adjacent to the ocean. Use and fueling of such equipment may result in accidental spills or releases of diesel, gasoline, oil or hydraulic fluid. To address these potential onshore spill sources and materials, the project MND also includes mitigation measure MM HAZ-2. This measure establishes the need to implement the Hazardous Materials Management and Contingency Plan developed for the project and provided as an appendix to the MND. This plan includes identification of appropriate equipment fueling and maintenance areas, testing for potential hazardous materials prior to facility demolition and/or removal, a daily equipment inspection schedule, a spill response plan, and maintenance of on-site spill response supplies.

Special Condition 1 would incorporate and memorialize mitigation measures MM HAZ-1 and MM HAZ-2 and help ensure that the offshore Oil Spill Response and Contingency Plan and onshore Hazardous Materials Management and Contingency Plan are fully implemented during all project activities. With this measure in place, the Commission finds that potential adverse impacts to marine biological resources and coastal water quality would be avoided and minimized.

Conclusion
Although the Commission finds that the proposed project has the potential to adversely impact marine resources, water quality, and the biological productivity of coastal waters, with implementation of Special Conditions 1, 2, 6 and 7, the project would be carried out in a manner in which marine resources and water quality are maintained, species of special biological significance are given special protection, the biological productivity of coastal waters is sustained, and healthy populations of all species of marine organisms will be maintained. In
addition, the proposed project, as conditioned, would maintain the biological productivity of coastal waters appropriate to maintain optimum populations of marine organisms. The Commission therefore finds the proposed project, as conditioned, consistent with the marine resource sections (Sections 30230 and 30231) of the Coastal Act.

E. Coastal Access and Recreation

Section 30210 of the Coastal Act states:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211 of the Coastal Act states:

Development shall not interfere with the public’s right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30220 of the Coastal Act states:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

The proposed project site includes a beach area adjacent to Pacific Coast Highway and near the city of Ventura and beach communities of Solimar and Faria. This beach and its adjacent waters are frequently used by the public for beach and water oriented recreation and informal parking areas serving it have been established on dirt pullouts adjacent to the southbound lanes of Pacific Coast Highway to the upcoast and downcoast of the gated entrance to the pipelines’ concrete shoreline vault. Many informal beach access trails have been established in this area, allowing access over the rip rap boulders that separate Pacific Coast Highway from the beach. Additionally, a formal beach access stairway is also located approximately 300 feet downcoast of the project site.

Several of the proposed onshore project activities have the potential to adversely affect public access to and use of this beach area. These activities include: (1) project equipment staging, vehicle storage, and project personnel parking; (2) the construction, use, and removal of the proposed equipment access ramp; (3) on-beach project activities including vehicle transit and the excavation, sectioning and removal of the pipelines and concrete vault; and (4) the abandonment-in-place of materials below recreational beach areas.

Staging
Project equipment staging and vehicle storage is proposed to occur within a fenced area maintained by CRC on the inland side of Highway 101 and within the informal parking areas along the shoulder of the southbound lane of Pacific Coast Highway.
Highway, the staging areas would extend roughly 100 feet to the upcoast and downcoast side of the pipelines’ shoreline vault (as shown in Exhibit 1).

The proposed vehicle beach access ramp would be constructed near the southeast corner of the shoreline vault. The proposed entrance to this access ramp would be within an area that can support between two and three vehicles – and would require the closure of this parking area to ensure that project vehicle ingress and egress from the beach is not restricted. Similarly, the proposed vehicle access route on the beach and the work areas themselves would also be closed to public access during project activities to help ensure public safety. Access across the beach at the project site would be restricted and the beach area immediately adjacent to the shoreline pipeline vault would be closed. CRC would implement a Traffic Control Plan that would include the use of flaggers and safety personnel to enforce these restricted areas and help facilitate the safe flow of traffic along Pacific Coast Highway during the two to three month project period.

While the temporary closure of limited beach areas (limited to within about 50 feet of active work sites) during project activities for safety reasons would not likely result in substantial or long-term adverse impacts to coastal access or recreation in the project area, closure of beach access trails or parking areas may result in temporary reductions in beach access and use. Although numerous pull-out areas are present along the southbound lane of Pacific Coast Highway in the vicinity of the project area, parking in many of these is prohibited. As proposed, the project and its staging areas would temporarily eliminate a substantial portion of the legal parking areas that serve the beach access stairway to the south of the project site. To prevent such adverse impacts from occurring, the Commission is requiring, in Special Condition 3, that staging and construction areas be demarcated and used in a manner that preserves existing public beach access parking in the vicinity of the beach access stairs located approximately 300’ downcoast of the project site. As part of this requirement, all parking and storage of vehicles for on-site workers would be along the CRC access road that extends inland from the shoreline vault site and/or the CRC property located inland of Highway 101.

**Equipment Access Ramp**

To bring excavation and pipeline and vault removal equipment onto the beach, CRC is proposing to construct an equipment access ramp that would extend from the shoulder of Pacific Coast Highway onto the adjacent beach. The ramp would be constructed over the top of the approximately 15 foot wide rip rap area at the landward edge of the beach and would be constructed from rock rip rap removed from around the perimeter of the concrete vault, cobblestones, sand and aggregate rock or gravel. This ramp would be approximately 30 feet wide and 60 feet long and would be made up of roughly 188 cubic yards of material.

Although CRC is proposing to fully remove the access ramp at the completion of on-beach project activities, if it is not installed in a manner that facilitates containment and removal, its use may result in discharge and release of a significant volume of small rock onto the existing beach area. This beach area is currently made up exclusively of fine and medium grain sand and its transformation to cobble or gravel may adversely affect existing public use and recreation. To prevent this, Special Condition 4 would require CRC to implement measures during installation of the ramp, such as use of a fabric liner below the small rock material, that will facilitate full removal of all aggregate base and cobble material from beach areas once the project is complete.
Further, **Special Condition 4** would also require all aggregate base and cobble material to be fully removed from sandy beach areas and restoration of these areas to pre-project conditions (as shown in the photographs provided in **Exhibit 2**). Implementation of these measures would help ensure that the existing beach conditions and recreational use of the project site would not be degraded as a result of the proposed installation and use of the equipment access ramp.

**On-beach Activities**
The proposed pipeline and vault removal activities would restrict access to an approximately ½ acre portion of the beach north of the Solimar residential community for between approximately two and three months. During this time, public safety hazards associated with heavy equipment use and pipeline winching, excavation, sectioning, and vault removal would require the establishment of a closed work area that would extend approximately 50 to 100 feet upcoast and downcoast of the pipeline vault site. Because of the low elevation of this area and its inundation at higher tides, activities within this area would occur primarily during low-tide periods when more dry beach area is available. During higher tides, equipment and materials would be removed from the beach and staged adjacent to the southbound lanes of Pacific Coast Highway.

This proposed use of the beach would restrict coastal access and the availability of beach areas for recreational use. However, these adverse impacts would be reduced through the proposed timing of the project during late winter and early spring months when public beach use in the area is close to its annual minimum and through the proposed use of six day work weeks that would compress the overall project duration. Further, the low elevation and frequent inundation of the beach at the project site and availability of other higher elevation beaches in the immediate vicinity of the project area (including approximately 300’ downcoast of the project site near the existing access stairs) would help ensure that alternative locations are available for public beach recreation. As such, the proposed temporary (two to three month) closure of the beach area at the project site would have only limited and short-term adverse impacts to coastal access and recreation.

These adverse impacts would be mitigated through the successful removal of the three pipelines and associated shoreline vault and the relocation of the rip rap from the vault site into a configuration aligned with existing rip rap on either side. Once complete, these activities would re-open an approximately 2,000 square foot beach area that has been occupied by the vault and surrounding rip rap since they were installed in the 1960s.

Although CRC is proposing to excavate and remove all of the rip rap boulders from around the concrete vault and remove the vault structure down to at least five feet below the existing sand grade (the level that can most effectively be removed without significant additional excavation and de-watering efforts), experience with other abandoned-in-place oil industry infrastructure in other locations around Ventura and Santa Barbara county has demonstrated that such efforts may not be adequate. In other locations, fluctuations in sand level has exposed previously-buried and abandoned-in-place oil production infrastructure on beaches and presented public safety and beach access challenges. To help ensure that this area of re-opened beach remains open and free of material (such as abandoned-in-place remains of the concrete vault or rip rap boulders) so that it can support the full range of beach recreational activities, **Special Condition 5** would require CRC remove any material associated with the vault or rip rap that becomes exposed in the future.
Sand Movement and Retention
In addition, a group of nearby homeowners have also raised concerns that beach access and recreation could be adversely affected through removal of the pipelines and vault because the alleged ability of these structures to trap and retain sand in downcoast areas would be lost. These concerns are more fully described in the correspondence provided to California State Lands Commission (CSLC) staff on January 19, 2020 from Dennis Chenoweth of the Solimar Beach Home Owners Association. A copy of this letter is provided as Exhibit 6.

In response to these concerns, a technical memorandum was prepared and provided for CSLC review by Dr. Chia-Chi Lu of Noble Consultants, a civil engineering firm specializing in coastal and harbor infrastructure. A copy of this memo is provided in Exhibit 7. This technical memorandum was also reviewed by the Commission’s staff geologist, Dr. Joseph Street. Dr. Street concurs with the findings discussed in the technical memorandum that the small diameter of the project pipelines, their partial burial, specific design, and location upcoast of the beach area of concern noted by Mr. Chenoweth would significantly limit any potential effect they could have on sand movement and retention. In fact, as Dr. Chia-Chi Lu notes, because structures perpendicular to the shore in southern California (such as rock groins) trap sand on their upcoast side, the removal of the pipelines and shoreline vault may facilitate more movement of sand downcoast to Solimar beach:

After removal of the vault facility and reuse of onsite riprap stones to construct a revetment segment that is tied into the existing adjacent revetments (see red lines in Figure 3), sand will then be able to be transported alongshore freely in either direction (upcoast and downcoast) without any potential blockage. However; as previously stated, based on review of historical aerial photographs and documentation at the project site, the existing vault and pipelines currently only induce negligible sand retention of alongshore sand movements, if any. Removal of the vault structures would allow free alongshore sand transport without any entrapment within the project area. The downdrift shoreline segment such as Solimar Beach may potentially benefit from freer sand movement. It should be noted that the impact induced by the existing vault structure is considered negligible and the potential benefit on the downcoast shoreline segment from structure removal may be limited. The existing beach profile or shoreline reconfiguration at the project site are expected to remain unchanged.

Drs. Lu and Street therefore agree that the proposed removal of the pipelines and shoreline vault would not alter the existing patterns of sand movement in the project area or adversely affect the presence and availability of beach areas.

In fact, because it extends slightly seaward from the surrounding rock rip-rap and onto the beach, the proposed removal of the shoreline vault would re-open a portion of the beach that has been occupied by the vault and surrounding rip rap for many decades. This area would cover approximately 2,000 square feet (roughly 40 feet wide by 50 feet long). As such, the proposed removal of the vault and pipelines would have a long-term benefit to coastal access and recreation by re-opening a section of beach for public use. To help maximize these benefits to coastal access and the amount of re-opened beach resulting from the project, Special Conditions 4 and 5 would require CRC to (1) fully remove from the beach all rock cobbles and aggregate.
material put in place during construction and use of the temporary vehicle access ramp and (2) return to the project site to recover any rip rap rock or concrete vault material that is abandoned-in-place below of the beach as part of this project and later becomes exposed on the beach. Through these measures, the open, sandy beach conditions at the project site would be protected in both the short and long-term.

Conclusion
With implementation of **Special Condition 3, 4 and 5**, the project would be carried out in a manner that would protect existing, and facilitate expanded, coastal access and recreation opportunities at the project site. The Commission therefore finds that the proposed project, as conditioned, consistent with the coastal access and recreation sections (Sections 30210, 30211, and 30220) of the Coastal Act.

**F. California Environmental Quality Act**

Section 13096 of the Commission’s administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (“CEQA”). Section 21080.5(d)(2)(A) of CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment. The project as conditioned herein incorporates measures necessary to avoid any significant environmental effects under the Coastal Act, and there are no less environmentally damaging feasible alternatives or mitigation measures. Therefore, the proposed project is consistent with CEQA.
APPENDIX A – Substantive File Documents

Coastal Development Permit Application No. 9-19-0858 and associated file documents.

County of Ventura Certified Local Coastal Program.

California State Lands Commission Mitigated Negative Declaration and Staff Report.


California Coastal Commission, July 2013. Adopted Findings in support of Coastal Development Permit No. 9-13-0204.
